Spring 2003



# Wastelines

#### 2003 Governor's Award for Pollution Prevention

The 2003 Governor's Award for Pollution Prevention was presented on April 21 at the New Hampshire Pollution Prevention Conference in Durham. The award, now in its ninth year, recognizes businesses and organizations that have successfully reduced or eliminated wastes at the source. Sullivan Tire Company of Bow, Portex, Inc. of Keene, and Wausau Papers of New Hampshire Inc., located in Groveton, are this year's winners.

#### **Sullivan Tire Company**



Sullivan Tire Company sells and services a wide range of tires and automotive components. Sullivan Tire recently upgraded its Bow plant by building a new

state-of-the-art retreading facility that reduces both energy consumption and raw materials. Pollution prevention efforts include:

☑ Upgrading to a cement-less process, eliminating cements and solvents. The company reduced cement use at the facility by 1,000 gallons, a bonding agent by 4,000 pounds, and rubber by 8,000 pounds. The net result in savings is \$46,000 per year.

✓ Reducing energy use at the facility by the installation of a low frequency, variable speed compressor and insulated curing chambers that consume less electricity. Energy savings are estimated to be 2 kilowatt hours/tire. Estimated cost savings are \$8,600 per year.



(Left to right) Phil O'Brien, DES Director of Waste Management, Anne Lustwerk, Sullivan Tire Training Coordinator, Ray LaBranche, Sullivan Tire Manufacturing Manager, Colleen Schwalbe, DES Pollution Prevention Program.

With these pollution prevention measures, Sullivan Tire increased its production efficiency by 10.5 percent, or from 138 tires to 150 tires per day. Total cost savings are estimated at \$87,500 per year.

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#### Portex, Inc.



Portex, Inc., a division of Smiths Group plc in Keene, is a national manufacturer and global distributor of medical devices. Portex was recognized for pollution

prevention efforts that include:

- ☑ Eliminating the use and disposal of ethylene dichloride, a bonding agent used in product assembly. The company's estimated cost savings for this project are \$1,000 per year.
- ☑ Initiating a water conservation project by using new preventative maintenance techniques developed to enhance efficiency of the six steam condensate discharge sinks. This project decreased water consumption by 1.6 million gallons per year, with projected cost savings of \$8,800 per year (water and sewer costs).
- ✓ Initiating an energy conservation program by switching to energy efficient monitors and installing new HVAC units. This project reduced the facility's electricity consumption by 230,686 kilowatts per hour. Projected cost savings are \$16,020 per year.

- ☑ Eliminating the use of polyvinyl chloride (PVC) trays in two production lines. This effort reduced PVC packaging by 27 percent. Estimated cost savings are \$6,000 per year.
- ☑ Implementing the use of reusable containers when receiving raw materials from suppliers. The company reduced the need to recycle 61 tons (19 percent) of cardboard, saving approximately \$59,000 per year.
- ☑ Implementing a program to scan company records onto a CD, thereby decreasing paper consumption and photocopying. Projected cost savings are \$25,000 per year.
- ✓ Starting a computer/monitor donation program, where used, serviceable computers are donated to local charities, businesses, and schools.
- ☑ Reducing noise pollution generated by the catalytic oxidizer by installing sound dampening measures at the exit stack.

The company is currently seeking ISO 14001 certification, which is expected by July 2003.



(Left to right) August Barr, Portex Director of Technical Services, Phil O'Brien, DES Director of Waste Management, Jacqui Beaman, Portex Manager of Environmental & Safety Affairs, Tim Talcott, Portex Director of Regulatory Affairs, Henry Malone, Portex Senior Project Manager, Colleen Schwalbe, DES Pollution Prevention Program, Mike Kennelly, Portex R & D Project Engineer.

#### Wausau Papers of New Hampshire Inc.



(Left to right) Phil O'Brien, DES Director of Waste Management, Denise Carsley, Wuasau Environmental Engineer, Dave Atkinson, Wausau Vice President of Operations, Colleen Schwalbe, DES Pollution Prevention Program.



Wausau Papers of New Hampshire Inc. in Groveton is a manufacturer of fine printing and writing papers in a variety of weights and colors. Wausau Papers

became a Governor's Award Winner by instituting two pollution projects: improving air emissions and reformulating a paper coloring dye to a less toxic chemical.

Starting in 1995, Wausau Papers began a series of improvements at its steam plant, which culminated in the installation of a high efficiency steam/electric cogeneration facility. This reduced air emissions by 85 percent, or 1,126 tons. Reductions in sulfur dioxide (SO<sub>2</sub>) emissions were so significant that EPA removed its on-site monitoring station. Estimated energy saving costs are over \$2 million/year.

Collaborating with their supplier to reformulate a paper coloring dye. This project eliminated ethylene glycol and substituted propylene glycol, a less toxic chemical, which resulted in a 2,054 pound air emission reduction. This project also eliminated a New Hampshire Toxic Air Pollutant, and EPA SARA 313 chemical at the facility.

#### **Congratulations to the 2003 Honorable Mention Award Winners**

#### City of Nashua Division of Public Works, Wastewater Treatment Facility, for:

✓ Constructing an anaerobic digester and biogas generator for greater solids reduction. The generated class B product does not have to be landfilled.

☑ The biogas generator produces 800,000 kilowatts of electricity per year, with an annual savings of \$72,000.

## Public Service of New Hampshire-Newington Station, for:

☑ Installing separated overfire air registers to reduce nitrogen oxides (NOx) emissions by 25 − 30 percent, with an estimated cost savings of \$225,395 per year.

#### **Cirtronics Corporation, Milford, for:**

✓ Implementing a waste-recycling program that donates its profits back to the community. ✓ Implementing an energy conservation project at the facility, with a cost savings of \$15,300 per year.

✓ Instituting a number of employee and community environmental awareness projects.



If you would like more information on the Governor's Award for Pollution Prevention, or would like to share your facility's pollution prevention project in an upcoming issue of *Wastelines*, please email cschwalbe@des.state.nh.us.



#### **NHPPP** Answers Your Environmental Questions

If you have an environmental question you would like to see answered, please email <a href="mailto:cschwalbe@des.state.nh.us">cschwalbe@des.state.nh.us</a>

We are looking to expand our business and need guidance to address any potential environmental impacts. Our property borders wetlands, and we have a former area of contamination behind our building. Where in DES should we first turn for assistance?

A great resource to assist you in examining your environmental compliance requirements is the DES *Guidebook for Environmental Permits*. The guidebook describes 81 different types of permits, licenses, certifications, approvals and notifications to address potential environmental impacts in areas such as wetlands, septic systems, air quality, waste management and site remediation. The guidebook is available in hardcopy, compact disc, or on the DES website at <a href="www.des.state.nh.us/permitguide">www.des.state.nh.us/permitguide</a>, or contact the DES Public Information Center at (603) 271-2975. Regulatory information, such as state statutes, administrative rules, and fees, are highlighted.

#### **Technology Update: Laser Touch**



The Iowa Waste Reduction Center (IWRC) developed a unique tool to reduce spray paint waste,

called the Laser Touch. The tool has proven to be beneficial to industry using spray gun application equipment. The key to using paint effectively and developing a high quality finish is increasing the transfer efficiency (TE). TE is measured by the ratio of paint that leaves the spray gun compared to the amount of paint that ends up on the part being sprayed. Laser Touch increases the TE of any spray gun.

The Laser Touch attaches to any model spray gun. Two laser beams project from the Laser Touch to the target painting surface. The laser beams can be adjusted to form a single dot when the spray gun is at the correct preset distance from the part. If the gun moves too far or too close, the beams separate. This enables the operator to paint and maintain the correct distance for consistent coverage.

Benefits of this product include improved finish quality, reduced rework, greater consistency among painters, reduced waste overspray and air emissions, and less spray strokes for spray technician. The Laser Touch reduces hazardous waste and ozone-depleting air pollution from spray painting. To learn more about this technology, please visit <a href="https://www.lt-t.com">www.lt-t.com</a>. IWRC has also developed a program where businesses can calculate their cost savings by using this product. Visit this cost calculator online at <a href="https://www.iwrc.org/programs/costcalc.cfm">www.iwrc.org/programs/costcalc.cfm</a>. (DES

www.iwrc.org/programs/costcaic.cim. (DES does not necessarily endorse this technology, but provides this update as a service to our Wastelines readers.)



#### **How Green Is Your Supply Chain?**

"Challenges of Greening the Supply Chain" was the keynote address at the Annual New Hampshire Pollution Prevention Conference. This topic has been gaining global attention for companies striving to achieve their environmental goals. Have you been making every effort in your business or organization for your products to be as environmentally friendly as possible? Do you ever wonder about the environmental standards your suppliers or vendors have? If your company does not require the same environmental standards from your suppliers or vendors, then maybe your products are not as environmentally friendly as you may think.

Supply chain management refers to the process by which "buyer" companies require a certain level of environmental performance from their manufacturing partners and vendors. When a company imposes environmental conditions on the products and processes of its suppliers, it is called "greening the supply chain" (GSC). Many companies undertaking GSC initiatives have found that working with suppliers on environmental issues not only generates significant environmental benefits, but also offers opportunities for cost containment and strategic and competitive advantages.

Companies are beginning to understand that customers and other stakeholders do not always differentiate between a company and its suppliers, and may hold companies accountable for their suppliers' environmental and labor practices. In addition, many companies are working to streamline their

supply base and develop more cooperative, long-term relationships with key suppliers, a practice that has fostered greater opportunities to work together on environmental issues. ISO 14001 is an environmental standard under which independent auditors evaluate environmental processes and system performance. If a company is ISO 14001 certified, they may start to require this certification from all of their suppliers.

To learn more about GCS, please refer to EPA's guide, "The Lean and Green Supply Chain: A Practical Guide for Material Managers and Supply Chain Managers to Reduce Costs and Improve Environmental Performance." You can read the guide online at <a href="https://www.getf.org/file/toolmanager/O16F9773.pdf">www.getf.org/file/toolmanager/O16F9773.pdf</a>.

#### **Suggested Reading**

An Ounce of Pollution Prevention is Worth 167 Billion Pounds of Cure - A Decade of Pollution Prevention Results. National Pollution Prevention Roundtable, January 2003. <a href="https://www.p2.org/p2results/2418">www.p2.org/p2results/2418</a> historyfinal.pdf

DES fact sheet WMD-REM-13 Requirements for Reporting Oil and Hazardous Waste Spills and Groundwater Contamination to DES. 2003. www.des.state.nh.us/factsheets/oil/oil-5.htm

DES fact sheet ARD-36 Wood Stoves and Air Pollution. 2003. www.des.state.nh.us/factsheets/ard/ard-36.htm



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#### **Calendar of Events**

May 6,7,8

Enviro Expo World Trade Center Boston Mass.

www.enviroexpo.com

#### May 15

Drinking Water Source Protection Workshop for Planners
DES, Concord, N.H.
(603) 271-3303
www.des.state.nh.us/workshops/SWProtect.htm

May 13 and June 17

Everything You Wanted to Know About Selling an Environmentally Healthy Home DES, Concord, N.H. (603) 271-4071 <a href="https://www.des.state.nh.us/workshops/HealthyHomes/">www.des.state.nh.us/workshops/HealthyHomes/</a>

#### **June 2-3**

Northeast Resource Recovery Association Conference Center of NH – Holiday Inn Manchester, N.H. www.recyclewithus.org/files/nrra/confattendee

### Wastelines is published by the

#### **NEW HAMPSHIRE POLLUTION PREVENTION PROGRAM**

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The New Hampshire Pollution Prevention Program (NHPPP) is a free, confidential, non-regulatory technical and compliance assistance program for New Hampshire businesses and others. The NHPPP maintains an information clearinghouse, conducts on-site pollution prevention opportunity assessments, provides pollution prevention planning assistance, and organizes conferences and workshops.

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